



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/995,407	11/27/2001	Mark P. Bendett	1014.010US1	1933
21186	7590	03/12/2004	EXAMINER	
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402			ASSAF, FAYEZ G	
			ART UNIT	PAPER NUMBER
			2872	

DATE MAILED: 03/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/995,407

Applicant(s)

BENDETT, MARK P.

Examiner

Fayez G. Assaf

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 3,4,7-15,19 and 22-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,6,16-18,20 and 21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/2002.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Art Unit: 2872

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election of Species 11: Claims 1, 2, 5, 6, 7, 16-18, 20-22 and 30 in the Response file 12/15/2003 is acknowledged. However, the language of claims 7 and 22 recites the third face being substantially perpendicular to the first face and the second face; and the language of claim 30 recites the pump light entering the second waveguide means along its side from the first waveguide means. Such features pertain only to the Species of Figures 5, 6 and 7. Accordingly, claims 7, 22 and 30 have been withdrawn from further consideration.

Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election **without** traverse (MPEP § 818.03(a)).

Currently, claims 1, 2, 5, 6, 16-18, 20 and 21 are believed to read on the elected Species.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 2872

Claims 1, 2, 16 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Shino et al. (US 5,519,803.)

Regarding claims 1 and 16, Shiono discloses an integrated photonic apparatus (see Fig. 2) comprising: a glass substrate (12 of Fig. 2) having a major surface (the largest surface of plated 12); a glass overcladding (Fig. 2, claim 18) on the major surface of the substrate, wherein the glass overcladding includes a plurality of regions (layers 14 and 15 of Fig. 2), each region having a different index of refraction, including a first region (14 of Fig. 2) having a first index of refraction and a second region (15 of Fig. 2) having a second index of refraction lower than the first index of refraction (line 45 to line 59 of Col. 5); and a first waveguide (13 of Fig. 2) formed along the major surface of the substrate, wherein the first waveguide has a higher index of refraction than an intrinsic index of refraction of adjacent portions of the substrate and the overcladding (line 39 to line 43 of Col. 5), and wherein the first waveguide has an edge along at least a portion of the first region of the glass substrate (see Fig 12.)

Regarding claims 2 and 17, Shiono discloses the first region including a dopant including an optically active species (line 47 to line 55 of Col. 4.)

***Claim Rejections - 35 USC § 103***

Art Unit: 2872

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 6, 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiono et al. (US 5,519,803.)

Shiono discloses the claimed invention except for the pump light being introduced into the first region, which acts to substantially confine the pump light, wherein the first region has a second face that is substantially reflective at a wavelength of the pump light.

However, utilizing a structure such as the one disclosed by Shiono to support a pump light is well known.

It would have been obvious, at the time the invention was made, to a person having ordinary skill in the art to utilize the first region for a pump light in order to improve versatility of the device as a gain medium in optical communication devices.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Blonder et al. (US 5,039,190.)

Art Unit: 2872

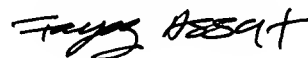
**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fayez G. Assaf whose telephone number is (571) 272-2307. The examiner can normally be reached on 8-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Fayez G. Assaf  
Examiner  
Art Unit 2872



FA  
3/2/04